

JAN 22 1929

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VOLUME II PITTSBURGH, PA., JANUARY 1929 NUMBER 8



ALBERT C. LEHMAN

Founder of the Albert C. Lehman Prize and Purchase Fund

(See Page 227)

THE CARNEGIE MAGAZINE

PUBLISHED MONTHLY, EXCEPTING JULY AND AUGUST, IN THE INTEREST OF THE CARNEGIE INSTITUTE, THE CARNEGIE INSTITUTE OF TECHNOLOGY, AND THE CARNEGIE LIBRARY, PITTSBURGH, PA. SUBSCRIPTION PRICE, ONE DOLLAR A YEAR; SINGLE COPIES TEN CENTS. ON SALE AT INSTITUTE POST OFFICE, JONES BOOK SHOP, AND PRISCILLA GUTHRIE'S BOOK SHOPS.

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VOLUME II NUMBER 8
JANUARY 1929

In rigorous hours, when down the iron lane
The redbreast looks in vain
For hips and haws,
Lo, shining flowers upon my windowpane
The silver pencil of the winter draws.

—ROBERT LOUIS STEVENSON

—♦—

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—CHARLES HEINROTH, Organist

—♦—

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The Carnegie Institute will be the final home of every worthy collection of pictures and museum objects when the men and women who have chosen them wish to have the world enjoy them.

—ANDREW CARNEGIE

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FOUNDER'S DAY 1931

4 ST. JAMES'S SQUARE, LONDON S. W. 1

December 12, 1928

DEAR CARNEGIE:

Thank you so much for your charming Magazine. I shall bear in mind my "promise to pay."

With all good wishes for Christmas and the coming year.

Sincerely yours,

NANCY ASTOR

JOHN MILTON ON THE VOLSTEAD ACT

So glistered the dire Snake, and into fraud
Led Eve, our credulous mother, to the Tree
Of Prohibition, root of all our woe.

—PARADISE LOST

Book IX, Lines 643-646

THE THANE OF CAWDOR

DEAR CARNEGIE:

Your readers owe you a vote of thanks for your article on "Macbeth," and beyond that, for your frequent and illuminating references to Shakespeare. In our family circle, in reading "Macbeth," we have run into what our Young Hopeful member calls a textual difficulty. Macbeth has just destroyed an army in which the false Thane of Cawdor was opposed to him. King Duncan, on hearing of Macbeth's victory, declares his purpose of appointing him Thane of Cawdor in place of the traitor. Yet when the witches hail Macbeth as Thane of Cawdor, he is nonplussed and makes the enigmatic reply, "The Thane of Cawdor lives—a worthy gentleman." Can you solve this mystery?

—EDITH TAYLOR

The question has perplexed other young hopefuls and many older commentators as well. But a solution seems to present itself in the text—Act I, Scene III—for when Macbeth repeats to Lord Angus his statement that Cawdor still lives, Angus intimates that Cawdor kept himself personally out of the battle, although sending his men in, in order that his treachery might be concealed. Hence, Macbeth was fighting Cawdor's troops without knowing that they were Cawdor's, and under the circumstances he was naturally perplexed to be hailed as Thane of Cawdor.

BON JOUR, DR. AND MRS. EDWARDS!

The heart of the educational community in Pittsburgh has been greatly uplifted by the magnificent gift of \$500,000 from Dr. and Mrs. Ogden M. Edwards to the University of Pittsburgh for the erection of laboratories at the medical center to serve the entire group of hospitals, and to be known as the Laboratories of Applied Science. This is an eloquent testimony that the needs for knowledge in Pittsburgh are well understood by our representative minds and is valuable both as to its own great power for good and for the influence it will exercise upon other philanthropic hearts among our people.

THE ALBERT C. LEHMAN PRIZE AND PURCHASE FUND

THE really beautiful things of this life seem to happen through an easy volition of their own and to take effect so quickly that they suggest a spontaneous creation of their own. And yet all beautiful things—whether they come from the physical or the spiritual world—must grow out of a prepared soil. When they are spiritual things, they are nearly always the result of deep thinking and of constant observation which leads first to approbation and then to practical encouragement. This is the line of growth which is bringing so many rich gifts, both of large and small amount, to the Carnegie Institute.

Just the other day there was a telephone call and Mr. Albert C. Lehman said: "Won't you come over to the Concordia Club at one o'clock and have lunch with me? I want to talk with you about some matters of mutual interest."

Well, it was a good luncheon, and when we had got well started on a repast where good digestion waited on appetite, and health on both, Mr. Lehman said:

"I have been studying your International Exhibitions and wondering whether, by an extension of prize awards, the larger advantage of the world's painters and the greater influence of the Carnegie Institute might be encouraged. If you think this is practicable, I would like to establish an annual prize of \$2,000 to be awarded to the best purchasable painting each year for five years and also provide a fund up to \$10,000 each year for the purchase of that picture for my own collection." And then he added, with a certain significance, "What the ultimate disposition of these paintings will be need not be declared at this moment."

The conversation brought out the great artistic value of Mr. Lehman's proposal. He was assured that his

prize and purchase gift constitutes perhaps the largest fund for such a purpose existing anywhere in the world, and that it would excite the eager participation of the painters generally, while giving a natural impetus to the work of the Carnegie Institute; and of course much was said in appreciation of his generous plan.

So, in a few days, when there had been a further conference on the subject, this letter came from Mr. Lehman:

Because of my interest in art, and my desire to assist you to obtain, if possible, a wider representation at your annual International Exhibition, I make the following offer to the Carnegie Institute, which I believe will be of benefit to the people of the City of Pittsburgh as well as to the Institute:

For a period of five years, beginning in 1929, I will pay the Institute each year, one week prior to the day of the opening of the International Art Exhibition, \$12,000 to be expended by it as follows:

Two thousand dollars shall be given as a prize for the best purchasable painting in the Institute's International Exhibition for that year, which shall be known as "The Albert C. Lehman Prize"; the award to be made by the Jury of Award of the International Exhibition. By "purchasable" painting is meant a painting which is for sale by the exhibitor, regardless of whether it is eligible for the Carnegie Institute First Prize, as I understand that many paintings appear in the Exhibition each year which for various reasons are not eligible to be chosen for the Institute's First Prize.

The \$10,000 remaining, or the necessary portion thereof, shall be used by you to purchase for me the picture receiving the \$2,000 prize, the purchase to be made at a price not in excess of that at which the picture is listed with you for sale.

Should the picture chosen by the Jury of Award not be obtainable for a total sum of \$12,000, including both the prize and the purchase price, then the painting will receive The \$2,000 Albert C. Lehman Prize, but whether or not the purchase of any other picture shall be made in that year from the balance of the fund shall be optional with me. Any part of the \$10,000 which for any reason is not used for the purchase of paintings in the year for which it is given shall be returned to me.

The Albert C. Lehman Prize may be awarded by the Jury of Award to the same painting which receives the Carnegie Institute First Prize in the

Exhibition; but if the painting receiving the Carnegie Institute First Prize is not purchasable, the prize shall be awarded to the painting which in the opinion of the Jury of Award is the best among those available for purchase, and it shall be purchased as above provided.

If the same painting should receive both the Carnegie Institute First Prize and The Albert C. Lehman Prize, and the Carnegie Institute desires to purchase this painting, I will waive in your favor any right I may have to purchase it.

If for any reason the International Exhibition held by you be discontinued in any year or years, my obligation under this offer shall not be terminated, but merely suspended until the Exhibition is resumed, with the understanding, however, that the obligation of myself or of my estate shall finally cease and determine with the year 1936, it being my intention to bind myself and my estate, in the event of my death, to make the \$12,000 payments for five years, whether or not they be in succession, but with the understanding as above noted.

I will be grateful to you if you will submit this offer to the Board of Trustees of the Institute and advise me whether they will accept it and agree to carry out, according to its terms, the obligations imposed by it upon the Institute.

The Board of Trustees was then called to take formal action upon the subject, which was duly done, as shown by this letter to Mr. Lehman:

At a meeting of the Board of Trustees of the Carnegie Institute held on January 7, 1929, your letter dated December 26, 1928, providing for the establishment of The Albert C. Lehman Prize and Purchase Fund was read, and a resolution was unanimously adopted by the Board instructing me to inform you that your proposition is approved and accepted, and to thank you for your generous action which will be so helpful in stimulating the growth and appreciation of art throughout the world under the auspices of the Carnegie Institute.

And Mr. Lehman expressed his own happiness over the consummation of the arrangement in these words:

I am very happy indeed to get your letter of the eighth and to know that the trustees of the Institute have accepted my proposition. I hope it will accomplish for art and for Pittsburgh what we both desire.

Mr. Lehman's very substantial act toward encouraging the promotion of art at Pittsburgh through the Carnegie Institute will naturally whet public interest in his career, which has been an

honorable and successful one. His father, Moses Lehman, was born in Frankfort, Germany, in 1850, and died in Pittsburgh in 1914. His mother, Fanny Frank Lehman, was born in Baltimore in 1856, and died in Pittsburgh in 1898. Our Mr. Lehman was born in Pittsburgh on October 14, 1878, and has lived here all his life. He attended the public and high schools of Pittsburgh, then the Stone School of Boston, and after that went to Harvard, where he was graduated in 1901, with the Bachelor of Arts degree. Returning to Pittsburgh, he entered the wholesale shoe business in 1901; in 1906 he organized the Blaw-Knox Company and became its vice president and general manager, and in 1914 was made its president. Mr. Lehman is a director in many other business corporations in Pittsburgh, New York, London, and Paris, and his qualities of leadership are shown by the fact that in most of them he is also president or chairman of the board. His club memberships include the Westmoreland Country Club, the Concordia Club, the Hundred Club of Pittsburgh, the Harvard Club of Western Pennsylvania, and the Harvard Club of New York. In the realm of philanthropy he is president of the Montefiore Hospital Association of Western Pennsylvania, trustee of the Federation of Jewish Philanthropies, trustee of the Jewish Big Brother Club, trustee of the Rodef Shalom Congregation, and trustee of the Young Men's and Young Women's Hebrew Association.

For many years he has been interested in raising funds for various institutions and causes in Pittsburgh without regard to their religious affiliations, provided only that he was convinced of their benefit to the broad cause of humanity. His personality is cheerful and cheering, and the instincts of helpfulness and service so pronounced in him that his character is charming and lovable.

THE SPIRIT OF SHAKESPEARE IN PHYSICAL RESEARCH

*An Address by OWEN D. YOUNG before the University
of the State of New York*

[There was such a chorus of approbation from our readers last month over the printing of Dr. Robert A. Millikan's address on "The Relation of Science and Industry" that we are giving them another discourse this month on a similar line of thought by an industrial master of arts. This imaginative and eloquent speech shows once more that the life of this nation is not based upon its material production, but rather that our whole material prosperity is based upon its progress in scientific research. It is therefore the things that make for scientific research, as education and the spread of knowledge, which should have the developing care of our people. As chairman of the General Electric Board, Mr. Young is not only one of the great business leaders of America, but he has established himself as one of the world's greatest economists. He was the chief among those expert advisers who formulated the Dawes Plan, and within the past few days it has been announced that Raymond Poincaré, Prime Minister of France, has chosen him to serve as the unofficial representative of the United States on the committee which will now revise the Dawes Plan so as to provide for the final war reparations to be paid by Germany. I asked Mr. Young recently to promise that he would come to Pittsburgh and deliver the Founder's Day address when he is elected President of the United States. He raised his eyes in amused astonishment and then, in a sort of helpless exhaustion, said: "All right—I promise!" S. H. C.]

ON June 1, 1889, I received my first diploma. It was granted by the Board of Regents of the University of the State of New York. It certified that I was to be accepted by the world as an academic graduate. Last night I received from you the honorary degree of Doctor of Laws, a much rarer but not more highly prized distinction. The first came when I was fourteen years old—the last at fifty-four. What honor, however great, can compete with the joy of taking home your first diploma? Now I thank you for them both. They mark a span of forty years, and together they constitute my most prized possession.

In a sense we have moved from an old world to a new, not only in the things we have, but in the way we think and the kind of things we talk about.

In 1889, at the time of my first diploma, I was thrilled by an oration, great of its time and kind. In the peroration the speaker told us how on one quiet moonlight night he had taken a canoe and gone out on one of the great bays of Lake Superior beyond the sight of land. There was no movement of the air or water, nothing but the arch of the sky above and its reflection below—a perfect sphere at the center of which was



OWEN D. YOUNG

an individual man alone.

In a recent lecture before the British Association at Oxford, Dr. Arthur S.

Much has happened during that forty

Eddington, Professor of Astronomy at the University of Cambridge, said:

Nearly midway in scale between the atom and the star there is another structure no less marvelous—the human body. Man is slightly nearer to the atom than to the star. About 10^{27} atoms build his body; about 10^{28} human bodies constitute enough material to build a star.

From his central position man can survey the grandest works of Nature with the astronomer, or the minutest works with the physicist. Tonight I ask you to look both ways. For the road to a knowledge of the stars leads through the atom; and important knowledge of the atom has been reached through the stars.

In both cases the individual man is at the center of the sphere, but how different the spirit of approach. I believe it characteristic of the two periods.

Ten raised to the twenty-seventh power measuring the number of atoms in the human body is just as much an appeal to the imagination as the perfect sphere on Lake Superior. But it is something more too, and it is that something which is suggested by the term research today. It reflects the intellectual bent of our time. It combines the imagination of William Shakespeare with the flair for knowledge of Francis Bacon. And so, Mr. President, with your permission, I should like to draw attention to two periods which have much in common, and which, to my mind, are the most productive of any in our history. They are three hundred years apart, the one from 1575 to 1650, and the other from 1875 to 1950; the latter, fortunately, with twenty-two years yet to go.

There seem to be periods when the imagination of men flowers in production. It appears to be stimulated by a demand for new things. Curiously enough, it has a relation to business and to profits. It matters not whether one speaks of Sir Walter Raleigh or Sir Francis Drake or William Shakespeare or Thomas A. Edison. The imagination is harnessed to a very prosaic need, and that, to my mind, is the distinctive characteristic of the periods of which I speak. Perhaps it is not so far away from the subject assigned to me, which

is the contribution of research to industry. My point is that the human intellect functions best when it is hitched more or less closely to practical service; and conversely, very ordinary jobs, such as navigation and the production of goods, take on a new aspect when there is cast over them the glow of the highest qualities of the human mind. The intellectual activity of the schoolmen in the middle ages was an interesting pastime, but it could scarcely have brought a greater thrill or more satisfaction than the solution of a crossword puzzle does today. So too, the navigation of a slave ship was a very different thing from that of the little fleet which carried Columbus westward, or Sir Francis Drake on his momentous voyage, or Commander Byrd on his present adventure. The combination of the imaginative qualities of the human intellect with the matter-of-fact production of goods or performance of service is an inspiration to both. This combination existed in the time of Elizabeth, just as it does today. It may account in some measure for the great things which happened then, just as I believe it accounts for the things which happen now. Let us take a look at the conditions of the two periods and see how much they have in common.

Since 1875 our population has almost doubled, urban growth has trebled, and the wealth and prosperity of the people have enormously increased. New industries have sprung up, science and invention have provided new things and afforded new ways of spending unexpected wealth. The quiet of a generation ago has been succeeded by great restlessness. Everywhere there is activity both in mind and body. Young men and women have flocked into our schools and colleges. They have called up in critical review, not only the fashions and customs of their fathers and mothers, but their very habits of thought. They refuse the old strait-jacket, and we call them unconventional and daring. Good—they reflect the

spirit of the age. Everywhere there is action, and not only action but speed. We race over our roads—we fly through the air—we talk across continents—we throw the energy of Niagara hundreds of miles to the points where we need it, and all these activities require daring and skill and nervous tension. It is life, not in repose, but in action.

So it was in the time of Elizabeth. Great companies were organized to reach world markets. The Armada was swept from the seas, Spanish influence in the western hemisphere was curbed, and England became a world power. Its population doubled and that of London trebled in a brief period. Young men were lured from the farms to the cities. Wealth increased rapidly, and with it the independence of the merchant classes. In the words of a contemporary observer: "This sort of people—commonlie live wealthilie, keepe good houses and travell to get riches—with grasing, frequenting of markets, and keeping of servants, they do come to great welth, in so much that manie of them are able and doo buie the lands of unthriftie gentlemen, and often setting their sonnes to the schools, the universities, and to the Inns of the Court."

New things were demanded and provided. Chimneys were invented, and tobacco, potatoes, and forks came into common use.

Riding in coaches became such a pastime as to threaten the business of the boatmen on the Thames. Luxury and extravagance reached such a height that a sumptuary proclamation referred to the "immeasurable charges and expenses" which certain classes "of better sorte" were put to "in superfluous apparelling their wives, children, and families, the confusion also of degrees in all places being great, where the meanest are as richly appparelled as their betters, and the pride that such inferiour persons take in their garments, drawing many for their maintenance to robbing and stealing by the hiewaye."

The monasteries were closed and the

authority of the church weakened. Preachers complained bitterly of the decay of morality, and learning at the universities reached a low ebb. By what grace, they inquired, just as we are inquiring today, would the generation be saved?

We can look back and see the answer.

This "merrie England" had awakened from a long sleep and found itself in a new world. The explorers and adventurers had discovered new continents and strange people in the far-off seas. There was wealth untold for him that would journey there. Men were in a receptive and appreciative state of mind, their curiosity was aroused, their intellects were hungry. Everywhere were imagination and action.

Printing had been invented. Few could read, but every one could understand, and so in the theatres and from the musical tongues of actors they could hear about the old English kings, about gods and goddesses, about Julius Caesar and Cleopatra, about the merchants of Venice, and about the strange things in far-off lands. Never before had there been in England so much to talk about.

What wonder then that professional talkers and writers sprang up everywhere as numerous as berries on a bush. It was not necessary to import foreign talent to establish the commercial means to meet this demand, and the theatre and dramatic industry, as it was indigenous, also became one of the most flourishing, comparable to the movie industry today in the number of theatres and crowds in attendance.

What an opportunity for money-making, and the illiterate pawnbroker Henslow, supplied with the necessary technical knowledge by the marriage of his daughter to the actor Alleyn, establishes a play factory where experts in plot-making and acting, specialists in tragical discourse, puns, and merry jokes are in demand. His plant turns out on an average one play every two weeks, and he manages to keep his actors in subservience and his poets in

constant need by the simple expedient of lending them money and never allowing their debts to be fully paid off. Go to Henslow's if you want a job at writing or acting, an old wig, a costume, or a play; and if the play is merely an old one that has been pilfered, rewritten, and renamed, that is your lookout. In any event, Henslow is growing rich and London is being amused.

But there is a young fellow come up from Stratford who will bear watching. He is only holding horses now for Hemming and the Burbages at the Globe, or perhaps he is an apprentice, but he is a likeable chap, clever, and sees everything, and by the time that seven years have elapsed your staff may be complaining that this Johannes factorum, this young upstart, plumed with their feathers, claims that he is able to bombast out a line as well as the best of them. They have booted his company with its "baggage books" out of the Oxford grounds, but he thinks he can show the University fellows a trick or two. Besides, they say he is ambitious and thrifty and has set his cap on making a fortune, getting a coat of arms for his family, and rubbing elbows with the nobility.

The first thing we know he will be going back to Stratford, buying the biggest place in town and with a twinkle in his eye letting the town fathers see that he wasn't such a good for nothing after all, and had in fact done better than any one else what everybody said he couldn't do at all.

Shakespeare's day came, and taking into account the other great movements of the period, it may seem not a little strange that now it is for him and others like him that the Tudor reigns are chiefly remembered. Today Elizabethan literature quite overshadows our interest in the commercial expansion, the religious controversies, the political intrigue of the period.

Yet the contemporary estimate was far different. Writing for the theatre was not practicing the art of letters. Dramatic composition in Latin and

Greek for performance at the University was noble and worth while, but plays written in the vernacular and for the amusement of the rabble were tainted with commercialism and of no permanent value. From the standpoint of the universities and cultured classes, the dramatists were only artisans and tradesmen, fashioning and vending their wares in accordance with public demand. "God forbid," exclaims Daniel, "I should my paper blot with mercenary lines. No, no, my verse respects not Thames nor theatres."

But Shakespeare and his contemporaries were supplying their active age with the things it wanted, and the universities might frown on the commercial playwrights. The devotees to old customs might lament the new ways, but in spite of all, the greatest imaginative intellects of the race were functioning in response to a real demand.

Shakespeare had drawn revenue as coproprietor of the Globe, as actor, and as poet to the extent of \$3,000 a year, and then returned to his mansion at Stratford with a comfortable estate of some \$50,000. He had been associated with men in the same business who had grown rich in catering to the public taste. Pope may have been far from jesting when he declared that Shakespeare

For gain, not glory, winged his roving flight,
And grew immortal in his own despite.

The criticism sounds strangely familiar to modern ears.

Just as the voyages of Vasco da Gama and Columbus and Magellan, by disclosing a new world, played havoc with traditional beliefs, created a demand for an explanation and an interpretation, and produced the great poets of the Elizabethan period, so the discoveries of Dalton and Prout and Crookes and Röntgen during the second half of the nineteenth century disclosed another and even more marvelous universe within the atom, for an explanation of which we look to the physical scientist of today.

The glories of the sun, the moon, and the stars, the wonders of nature have always been a theme for poets and philosophers. Since the days of Democritus and Lucretius the granular structure of matter had been discussed, and speculation even reached the point where all matter was conceived of as compounded of the hydrogen atom. But thought had gone no further when many of us received our diplomas and were sent out into the world to show the benighted what education could do for a man.

Soon, however, from continued experiments on electrical discharges in rarefied gases and especially from a close study of the so-called cathode rays, scientists were led to recognize the existence of the electrons, small negatively charged particles of which all matter was composed, each 2,000 times as small as this same hydrogen atom.

There are about two billion inhabitants on the globe. If every man, woman, and child had five hundred billion dollars and each dollar represented an atom, their total wealth would still fall short of the number of atoms found in a drop of water. It contains so many that if the entire earth, both land and sea, were covered with a velvet lawn, and each blade of grass represented ten thousand atoms, the little elf of science could collect them all in a basket the size of a raindrop.

Is this imagination? To the physical scientist not at all. These things have been weighed and counted. Radium, X rays, and radio bear witness to their reality. But what is this atom; what are these electrons, parts of itself that it shoots forth at the speed of light? Here we are definitely in the field of speculation and fancy, and hardly a year passes that does not see the entrance as well as the exit of a Thompson, a Rutherford, a Langmuir, a Bohr, or a Shroedinger form of atom. The electrons are in concentric spheres about a central proton, they stand still, they move at the rate of one hundred thousand miles a second, they travel in

orbits, they are like planets moving about a central sun, they are but a vibrating mass of ether. The space relative to their size for their accommodation within the atom, itself infinitesimally small, is no less ample than the solar system itself.

In his attempt to unify physical nature, the physicist turns from the infinitely small to the incomprehensibly great. Like the true poet that he is, he lets his eye glance

From heaven to earth, from earth to heaven;
And, as imagination bodies forth
The forms of things unknown, the poet's pen
Turns them to shapes, and gives to airy nothing
A local habitation and a name.

Light travels at the rate of 186,000 miles a second, and the distance that it travels in a year is some five thousand billion miles. Using this light year as his yardstick, the astrophysicist finds the nearest star twenty thousand million miles away; finds that the largest would accommodate the entire orbit of the earth with millions of miles beyond Neptune to spare; finds the smallest about the size of the earth, with matter weighing about a ton per cubic inch.

These blazing orbs with temperature of forty million degrees are the furnaces in which he sets his crucibles. They number four billion, yet are so far apart that they are in no more danger of colliding than thirty baseballs roaming the whole interior of the earth. Their characteristics "depend on the simplest and most fundamental laws of nature, and even with our present knowledge might have been predicted from general physical principles if we had never seen a star." "So detailed an interpretation of the properties of the greatest bodies known in nature, directly from the properties of the smallest, constitutes," as has been truly said, "one of the most notable triumphs of modern physical science," and, I may add, of the human imagination.

Only a few of the paths to truth have yet been traversed and who can predict

what the future may have in store. For observe that with all our investigations and inquiries we are not creating anything. We are only finding out what already exists—facts of which mankind must take account if it is to survive.

Does nature wait until she is found out before she exacts her penalties or bestows her blessings? Not at all. In the reign of the Tudors about a quarter to a sixth of the population of London was wiped out every generation and in a single season by epidemics and disease, and in Shakespeare's day the death rate determined whether the theatres should be open or closed. Today, thanks to research, such plagues are almost unknown. For millions of years the sun has delivered her life-giving rays at the rate of 4,690,000 horse power per square mile, worth at current rates upwards of two billion dollars a year. Now physical research has disclosed yet other rays coming from space with a wave length one hundred millionth that of light and five thousandths that of X rays, the shortest heretofore known. What effect these may be producing on us as we gather here, or on the material substance in the walls of this edifice itself is at present unknown. They may be keeping us alive, they may be destroying us or what they do may be entirely within our control. Future physical research will find out. A microscopic speck of yeast under proper conditions will produce seventy-five tons of edible food in ten days. What blessings may not the electron and the cosmic rays some day confer on a perishing race when their incredible hidden energy is tapped and brought under control.

Human progress may be compared to an ascending spiral, and the course of civilization may be divided into successive periods of activity and apparent rest, each of which is destined to make its special contribution to the total sum. Now it is to art, now to religion, now to the science of government, now to literature, now to philosophy, now

to physical science, now to industry that we point in evaluating these epochs, for these are the things of the spirit and the intellect that do not perish though heaven and earth pass away.

When Shakespeare was born, our English literature was represented by Chaucer with his "Canterbury Tales," and the struggling efforts of Langland with his "Piers Plowman," and John Gower with his "Confessio Amantis," together with some pastorals and interludes and a few early plays like "Gammergurtton's Needle," and "Ferrox and Pollux." Save Chaucer they were not important in themselves. The next fifty years not only made a language but a literature. It brought into being works, the like of which have not been equaled since. It seems as if all the imagination and resources of the race which had been growing roots for many generations suddenly blossomed into Shakespeare, and Ben Jonson, and Marlowe, and John Milton. This, of course, is naming only a few, because men of real first-rate capacity sprang up everywhere. In its freshness and verve and spirit, no other period, certainly in our literary history, has approached that stretch of two generations beginning with Edmund Spenser and Sir Philip Sidney, reaching its height in William Shakespeare and ending with the lofty refrains of John Milton.

Coming to the later period, perhaps Charles Darwin was the Chaucer of our time. It may be that Faraday and Joseph Henry had their counterparts in the earlier day in another field. But broadly speaking it is true that with occasional exceptions the human mind had lain fallow in the field of practical achievement until 1875, just as it had in the field of language and literature before 1575. And then what a burst of glory. Graham Bell comes with the telephone, Edison with the electric lamp and a system to work it. Power, whether developed by steam or water, once stationary, is now mobile. The motor car replaces the horse, the flying

machine conquers the air, and radio waves, knowing no physical barrier, become carriers of the valuable intangibles of life to all people everywhere. So the intellect of man blossoms again and makes amazing contributions to human welfare.

In the words of Bagehot, Shakespeare's works could only have been produced by a first-rate imagination working on a first-rate experience. But, he added, "to a great experience one thing is essential—an experiencing nature." In other words, receptivity and appreciation of the things in the midst of which we live. There is more than a coincidence in the fact that the generation following Columbus produced a Copernicus and a Luther, and the next a Galileo and a Shakespeare. Emerson said, "The poet is the man who sees and handles that which others dream of, traverses the whole scale of experience, and is representative of man, in virtue of being the largest power to receive and impart." He is "a heart in union with his time and country."

And so, Mr. President, I salute the workers in physical research as the poets of today. It may be that they do not write in verse, but their communications are of such lively interest that they are on the front pages of our newspapers and command space in our cultural periodicals. They appeal to the imagination of us all. They contribute the warming glow of inspiration to industry, and when industry pulls their ideas down from the heavens to the earth and harnesses them for practical service, it too feels that it is an important actor, not only in the making of things, but on the larger stage of the human spirit. There may be enough poetry in the whirl of our machines, so that our machine age will become immortal.

My conception of a statesman is of one who represents a great idea, an idea which may lead him to power, an idea with which he may identify himself, an idea which he may and can impress on the mind and conscience of a nation.

—DISRAELI

MAKING AMERICANS

There are approximately 15,000,000 foreign born in the United States. More than 6,000,000 of them cannot speak or read the language of America. More than 3,500,000 are men of voting age, but not citizens. More than 1,500,000 are illiterate. These people come to America by choice, not by chance. They come to us eager to be accepted, hoping to become, as quickly as possible, Americans. The greatest barrier in their way is ignorance—ignorance of our language, laws, and customs.

Sooner or later, the foreigner turns to the library for help in these problems; first, to take out books in his own language, and later to borrow American books from which he can learn the language. Often it is the foreign children who introduce their parents to the library.

"The fact that I am able to dictate this letter in the English language I owe to the Boston Public Library," Morris Gest wrote to the Chairman of the Boston Library Board, and he gave the total proceeds of one performance of "The Miracle" as an expression of gratitude to that library. He is not an exceptional case. Thousands of foreign-born Americans have learned to know our language as well as our history and our institutions through books borrowed from the public libraries. In New York the circulation in foreign languages alone exceeds 700,000 books a year.

The fact that the public library takes no sides; that it exists for service; that it is a public agency provided to help equip the individual with knowledge for his personal and social life enables it to approach the immigrant in a different way from any other agency. Valuable as is the work already done in this field, much still remains to be accomplished. To promote and improve reading opportunities for "Americans in the making," the cooperation of firms and individuals interested in education is needed.

—THE AMERICAN LIBRARY ASSOCIATION

ANOTHER VIEW OF IMMORTAL LIFE

For me life is a web and is immortal. Sir Oliver Lodge and I are infinitesimal specks in that colossal web, as are also the 1,800,000,000 other human beings who keep us company on this earth. The web of humanity, now on the loom of time, is but the end of the immeasurable sheet that recedes into the abyss of the past and the beginning of another to which we can see no end. It is true that men who have studied the sun assure us that a time will come when our planet will be unfit for life, but as that calamity lies millions of centuries ahead, we may reasonably call the period assured us an immortal lease. It is in this material sense that the biologist regards man as an immortal being; we survive, if we survive at all, only in the lives of our descendants. Every man and woman is born with the seeds of immortality within their bodies.

—SIR ARTHUR KEITH

CONTEMPORARY FRENCH PRINTS ON DISPLAY

An exhibition of contemporary French prints comprising about a hundred etchings, lithographs, and dry points is now on view at the Institute through January 31. This show has been brought to this country under the joint auspices of the French Association for the Expansion and Exchange of Art and the



SELF-PORTRAIT OF MARIE LAURENCIN

American Federation of Arts. The following modern artists, many of whose paintings are familiar to Pittsburghers through the annual Internationals, are represented in the display: Maurice Asselin, Albert Besnard, Pierre Bonnard, Georges Braque, Eugène Carrière, Charles Cottet, André Dauchez, Hermine David, Edgar Degas, Maurice Denis, André Derain, Jean-Louis Forain, Pierre Laprade, Marie Laurencin, Auguste-Louis Lepère, Henri Matisse, Odilon Redon, Pierre-Auguste Renoir, Steinlen, Toulouse-Lautrec, Maurice Utrillo, Maurice de Vlaminck, Edouard Vuillard, Waroquier, and others.

THE MAKING OF WILLS

In making a will, money left to the Carnegie Institute should be covered by the following phrase:

*I do hereby give and bequeath to the
CARNEGIE INSTITUTE in the City
of Pittsburgh, Pennsylvania*

And bequests to the Carnegie Institute of Technology should be phrased like this:

*I do hereby give and bequeath to the
CARNEGIE INSTITUTE OF
TECHNOLOGY OF PITTS-
BURGH, PENNSYLVANIA*

It will be helpful to our friends who desire to bequeath funds to these institutions to know that all sums left as endowment to the Carnegie Institute, in support of its various departments, will be matched, up to a certain amount, dollar for dollar in 1936 by the Carnegie Corporation of New York; while endowment bequests to the Carnegie Institute of Technology will be matched in 1946 on the basis of two dollars from the Corporation for every one dollar received from our friends—our total to be \$4,000,000 in order to get the Corporation's \$8,000,000.

Surely no civilized community in our day can resist the conclusion that the killing of man by man, as a means of settling international disputes, is the foulest blot upon human society, the greatest curse of human life, and that as long as men continue thus to kill one another they have slight claim to rank as civilized, since in this respect they remain savages.

—ANDREW CARNEGIE

THE GARDEN OF GOLD

"JASON—JASON!" cried Penelope, as they sat on the deck of the Argo, "who is that big, strong man with the great club coming here? Can it be Samson?"

Jason peered under the shade of his hand, and then shouted in a glad voice:

"No, Penelope, no—bless my soul—it's Hercules!" And springing over the side of the boat, he grasped his old shipmate in his arms. When the two ancient heroes had finished their embraces, they came upon the Argo, where Penelope greeted the giant with eager interest and enthusiasm.

"Hercules," cried Penelope, smoothing her hand over his club with a child's delight, "through many years I have longed to meet you. Won't you tell me some of your adventures? Jason speaks of you frequently, but I wish so much to hear these stories from your own lips."

"Well," said Hercules, seating himself comfortably on a huge chair and throwing his club on the deck, "the adventures began when I was nothing but a kid—didn't they, Jason?"

"I'll say," answered Jason.

"You know, Jupiter was my father," continued the strong man, "and Alcmena my mother—a very beautiful woman, but a mortal. This made trouble with my father's wife Juno, who had no love for me, and what did Juno do one day when I was all by myself but send two serpents to destroy me."

"It was a bad day for serpents," interrupted Jason, "for Hercules seized them both in his baby hands and strangled them."

"Good work, Hercules!" said Penelope. "And what did Juno do after that?"

"Why, Juno then chose an old tyrant of a schoolmaster named Eurystheus and enjoined me to obey all of his commands, and the things he ordered me to

do were so unbelievably hard that they are now known as the Labors of Hercules."

"Oh!" said Penelope, "that's why an extraordinary achievement is now called a Herculean task. But what were these labors?"

"There are too many to describe all at once," said Hercules.

"That stable job was one of the biggest things," suggested Jason.

"Yes, and the least agreeable of them all," answered Hercules. "You see there was a king called Augeas, who had a herd of three thousand oxen whose stalls had not been cleansed in thirty years."

"Bad housekeeping," commented Penelope.

"Worse than that," said Hercules.

"Well, all the shovels in the world wouldn't have served the purpose, and besides no one was allowed to help me. But I found that there were a couple of underground rivers, known as Alpheus and Peneus, running near there, so I pulled a lot of rocks out of the ground to let the waters loose and turned these rivers into the Augean stables, and in about twenty-four hours the job was done."

"I suppose that was the biggest stable in the world," said Jason admiringly, and Hercules beamed at the compliment.

"Oh, no, Jason," said Penelope, "when I was in Morocco just three or four years ago, I visited a stable at Meknes built by the Sultan, Mulai Ismael, of huge stones, with vaulted roofs, and containing great avenues of stalls sufficient to accommodate twelve thousand horses—in fact, the Sultan's whole cavalry used to ride in there—and everything was as clean as a new pin."

"Things like that in modern times?" inquired Hercules, with a shade of disappointment.

"Oh, yes, the modern world has things bigger than any of the great enterprises Jason tells me about," replied Penelope. "There is a modern Hercules in this country right now—we call him Uncle Sam—and just a little while ago he went to a place which is the backbone of the American continent and flung great mountains to one side or the other until he had made the Panama Canal and joined the Atlantic and Pacific Oceans together."

"Why, that's just what I did in order to break into the Mediterranean from the Atlantic," said Hercules, his face glowing with pride. "I pulled a lot of great mountains out by the roots at Gibraltar and gave the world a channel there, and the Pillars of Hercules stand to this day to prove it. I'd like to meet this Uncle Sam."

"By the way, Hercules," continued Penelope, with a shade of mischief in her eyes, "did you ever see that Shakespeare says there are some things that even you cannot do?"

"Who's he, and what did he say?" growled Hercules, touching his club with his foot.

"Why, he says—or he makes Hamlet say:

Let Hercules himself do what he may,
The cat will mew and dog will have his day.

Hercules laughed.

"Who cares about dogs and cats?" he asked.

Penelope looked up and gave a shout of joyful welcome.



HERBERT DUPUY

"Hercules," she said, "since you have come to see us, I want you to meet one of our most regular and most welcome visitors, Mr. Herbert DuPuy. He has come in here every month for now seven months and always leaves

money to plant in the Garden of Gold."

"Pleased to meet you, Mr. DuPuy," said Hercules, grasping the visitor's palm.

And Mr. DuPuy gave into Jason's hand the sum of \$75 to make a special addition to the funds of the Carnegie Museum, and in 1936, when the Carnegie Corporation of New York gives one dollar for every one raised by the Institute's friends, this sum will be worth \$150 in that settlement.



CLARENCE OVEREND

Thus it happened that Hercules chanced to meet many a good friend of the Gardener and his wife that day, for on the heels of Mr. DuPuy came Clarence Overend, alumni executive secretary at Tech. Hercules was much impressed with Mr. Overend when he heard that he was also graduate manager of Tech's famous athletes and therefore listened most attentively as he told of the \$610 he had for the Tech endowment fund. This sum was the result of six hundred and ten one dollar contributions made on the anniversary of Mr. Carnegie's last birthday, an annual Tech observance. By means of the admirable settlement plan of the Carnegie Corporation this, with interest added, will grow to \$4,904.40 in 1946.

This was a good day for Tech, for the girls of Beta Pi — which sounds like something good to eat — all Fine Arts students, found their way into the Garden with a gift of \$50 from their sorority. Last year the Beta Pi's gave



FLORENCE BRIGHT

\$20, and Miss Florence Bright, their president, told Jason how happy they all were to be able to increase the contribution this year. Figured up according to the Corporation's magical multiplication table, the Beta Pi's will go on record in 1946 as having given \$402.



JANE FALES

Hercules had not ceased admiring these Fine Arts girls when some of their sisters from across the way joined them. Jason quickly identified them and introduced them as the group that had called last year from the Costume Economics Department at the Margaret Morrison Carnegie College, leaving \$100 for Tech's worthy endowment. Miss Jane Fales, who ably heads the Department, turned over a second \$100 and told Jason how the girls had earned it by selling their own wares, which they had made in class. And of course this means, at compound interest, \$268, which, matched two for one by the Corporation, becomes \$804 in 1946.

"I never saw any one with so many generous friends," observed Hercules. "But here comes another." And Jason presented Charles D. Armstrong, who said he wanted to leave the \$500 which he had been giving annually as his share in support of the Venezuelan expedition. This exploration is a joint one under the sponsorship of the Carnegie Museum and the National Geographic Society, and Ernest Holt, assistant in the section of Ornithology, and his wife will soon be writing the Magazine some of their discoveries



C. D. ARMSTRONG

about the bird life of that South American country.

"I am really so delighted to have you with us for this visit, Hercules," said Penelope, as she and Jason guided the giant to their cottage for supper, "and I am dying to hear more of your adventures."

PITTSBURGH ATHLETIC ASSOCIATION'S NEW PICTURES

THE Pittsburgh Athletic Association is to be congratulated on the modern collection it is gathering from time to time. The works of such artists as Speicher, Spencer, Knox, Menard, Maxence, and Martinez-Cubells y Ruiz already decorate its halls, and now three more join them—added as a result of a recent purchase from the Twenty-seventh International. Three of the most striking pictures in the show—"Race Track, Deauville," by Guy Pène du Bois; "Swamp Willows," by Ernest Lawson; and "A Christening Party at Chartre," by Carl Schmitt—are now a part of the Athletic Association's permanent collection.

STUDENT EMPLOYMENT

THE free employment service conducted by the Carnegie Institute of Technology for its students and graduates makes possible the placing of many Carnegie men and women in advantageous positions throughout the world each year.

A survey of the placement figures for 1928 at once reveals the efficiency and the benefit of this service. In the past year 424 Carnegie graduates earned \$752,038 in positions which they had secured through the recommendations of this helpful Tech Bureau. By the same medium 5,014 night or part-time students obtained part-time positions.

THE GOODHUE EXHIBITION

By FREDERICK BIGGER

How shall we speak of Bertram Grosvenor Goodhue, one of the greatest of American architects, when more skillful writers have already told about him and his work in most admirable fashion! Yet something must be said if only to remind the readers of the *CARNEGIE MAGAZINE* that an extraordinary collection of drawings is now being shown in the second floor galleries of the Fine Arts Department and will continue on exhibition until February 10. And yet this collection, rich and enticing as it is, does not disclose the full gamut of facile imagination or the ripest fruition of a rare architectural genius.

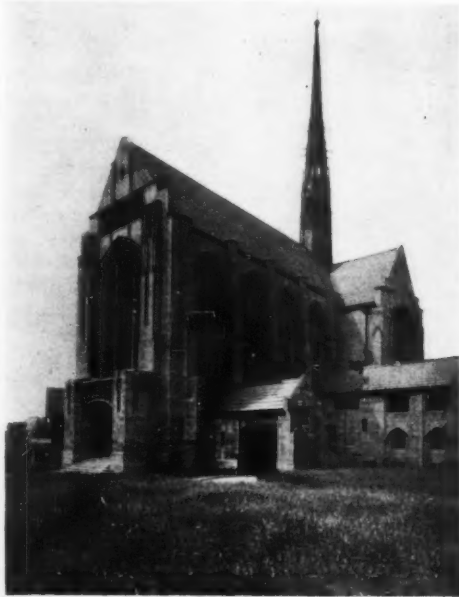
The collection of more than one hundred sheets of original drawings of churches, residences, furniture, book-plates, and imaginative sketches is held in the custody of the School of Architecture of the Massachusetts Institute of Technology, by whose courtesy it is now shown in Pittsburgh. Among these drawings may be seen the skill of the boy and the youth merging into the

mastery of the craftsman, with pencil and etcher's needle, crayon, pen, and brush. The more patient visitor may trace this development from the pencil sketch of 1878 when Goodhue was nine years old (Mat No. 91), to the etchings made at sixteen (Mat No. 88), and so on. As we pass around the galleries, looking at familiar drawings, we feel that we shall envy any visitor who for the first time sees and feels in these drawings that remarkable facility, delicacy, freshness, imagination, and vigor which are, in themselves, so exhilarating, and which must suggest even to those

ignorant of architecture that this master draughtsman was also something more than a pictorial artist.

C. Howard Walker says:

And so his desire led him into the minor arts . . . and he became a master in them all. These are the essentially decorative arts which embellish all materials and objects. It is a long and fascinating list of work in these arts that accompanies the greater architectural work of Bertram Goodhue. The variety and scope is unusual. Whether he sought his expression in printing and engraving, in textiles, or in metal work, in stained glass or in



THE FIRST BAPTIST CHURCH IN PITTSBURGH

carving, his skill was equally manifest. A collection of his book embellishments alone, whether of type fonts, titles, borders, or colophons, would mark him as an accomplished designer. His pen and ink drawings for this work are unexcelled, as are the perspectives which expressed his architectural work. His black and white drawings were distinguished—having a sense of contrast of tone and of light and shade and a quality of line seldom found. Like most men of genius, his earliest productions were exuberant and the rich contrasts in medieval precedents gave him pleasure and inspiration, and influenced his expression.

Born in Pomfret, Connecticut, in 1869, of good family, this artist found his direction early, as sketches in this exhibition bear witness; and his untimely death in 1924 snuffed out a creative ability of striking temper and scope. For many years his close partnership association and cooperation with Ralph Adams Cram gave their firm a reputation through which only a few took thought to penetrate their respective personalities. But from a list of some of the buildings, not represented in this exhibition, wherein Goodhue alone exercised control of the design, or in which his contribution is well known, visitors may recognize some which they know and admire: the First Baptist Church in Pittsburgh; the Chapel of the Intercession in New York City; Saint Bartholomew's Church in New York City; the Church of Saint Vincent Ferrer in New York City; the Chapel of the University of Chicago; the Saint Thomas' Church in New York City (with Cram); the Chapel of the United States Military Academy at West Point; the San Diego Exposition; the California Institute of Technology at Pasadena; the National Academy of Science and National Research Council in Washington, D. C.; the State

Capitol at Lincoln, Nebraska—one of the most striking and admirable of modern buildings; and the Los Angeles Public Library.

These various works, as well as most of the drawings in the present exhibition, may be seen in that very beautiful example of fine book-making, "Bertram Grosvenor Goodhue, Architect, and Master of Many Arts." In it may be traced the growth of the Goodhue genius, in partnership and in later independent practice; and there also his rare and charming personality is revealed by the pen of a peculiarly sympathetic and able editor, Charles Harris Whitaker. If it were possible to put this somewhat costly book in the hands of every person who is to see the present exhibition, we feel that a deep and very significant human experience would illuminate the visit to the galleries. The next best thing, of course, is that the Goodhue record should be available in the public libraries or in the private libraries of those who are devoted to the admiration or cultivation of the Fine Arts.



A GATEWAY AT WEST POINT

THE COUNTRY ROADSIDE GROUP

At an impressive ceremony held in the Botanical Hall of the Carnegie Museum on Wednesday afternoon, December 5, a beautiful habitat group showing the spring flora of Pennsylvania was formally given by the Garden Club of Allegheny County to the Museum. Mrs. Roy A. Hunt, president of the Club, made the presentation and, in the absence of Dr. Andrey Avinoff, Director of the Museum, the gift was graciously accepted by the Director-Emeritus, Dr. W. J. Holland. After the unveiling by Mrs. T. H. B. McKnight, Dr. O. E. Jennings, Curator of Botany, outlined the scope of the group and gave some interesting information about the various plants displayed.

Among those who attended the function were Mrs. John A. Stewart Jr.,

of New York, president of the Garden Club of America; Mrs. S. V. R. Crosby, of Boston, chairman of the Conservation Committee of the Garden Club of America; Mrs. Luis J. Francke, of New York, vice chairman of the Conservation Committee of the Garden Club of America; and Mrs. Horatio Gates Lloyd, of Philadelphia, editor of the Bulletin of the Garden Club of America. The officers of the Garden Club who were present on the occasion, besides Mrs. Hunt and Mrs. McKnight, were Mrs. Walter S. Mitchell and Mrs. Henry O. Rea, vice presidents; Miss Alice B. Robinson, treasurer; Mrs. Frank Scott Willock, secretary; and Mrs. Harvey Childs Jr., Mrs. James D. Hailman, Mrs. James D. Heard, Mrs. B. F. Jones Jr., Mrs. Telesio Lucci, Mrs. Richard



A SPRINGTIME ROADSIDE IN ITS UNSPOILED LOVELINESS



FIRE DEVASTATION



PICNIC DESECRATION

B. Mellon, and Mrs. William H. Mercur, directors.

In making this latest gift, the Garden Club but continues its generosity in behalf of the public through the Carnegie Institute. Its record of friendliness includes the establishment of the Garden Club Prize of \$300 for the best painting of a garden or flowers in the International, the only prize of its kind in the world, which was awarded for the first time in 1925; the landscape improvements at the entrance to Schenley Park, which came as the result of a study made possible by the funds of the Club; the beautiful flower study, "Under the Umbrella," by Johanna K. W. Hailman, now in the Institute's permanent collection; and the exhibition of art and science in gardens, held at the Institute in 1922.

The local flora group shows a characteristic scene in the rolling country near Pittsburgh. The season is spring and the blossoming plants shown are those which are much in need of thoughtful protection on the part of the public. The same spirit of reckless destruction of our native wild life before the passage of Game Laws is now threatening the realm of our local flowers. The many species of trillium, bluebell, skunk-cabbage, dogwood, and others must be preserved against wanton extermination by careless woodland visitors. This is the message of the group, stressed by two miniature displays showing the ravages wrought by inconsiderate picnicking parties in making rubbish and starting fires. This installation sounds a timely warning

against the vandalism of the gentle sanctuaries of nature, and this latest thoughtfulness of the Garden Club, carrying its useful lesson to the happy minds of strolling roadside wanderers, will be immensely useful in protecting and preserving nature in her most enticing moods.

The group was designed and executed by Ottmar F. Fuehrer, of the Taxidermic section, who also painted the lovely background. The skillful and painstaking construction of plants in wax was accomplished by Miss Anna Dierdorf and her assistant, Mrs. R. L. Fricke, under the expert supervision of the chief Taxidermist, Remi H. Santens. The miniature side groups were the work of Mr. Fuehrer and Harold J. Clement. These able craftsmen succeeded in giving a striking illusion of reality. Altogether, it is a notable achievement and constitutes the first of four groups which will adorn the Hall of Botany, portraying—besides the local flora—the tropical jungles, giant cacti in the desert, and the vegetation of the high alpine zone.

WHY, MR. CHESTERTON!

It is a pity that the radio, the most marvelous facility for the transmission of speech, had to come at a time when nobody had anything to say.

—G. K. CHESTERTON

WHICH IS BETTER?

A difference between England and America is that in America there is equality but no liberty, whereas in England there is liberty but no equality.

—ST. JOHN ERVINE

ON THE KNOCKING AT THE GATE IN MACBETH

DEAR CARNEGIE:

Your article on "Macbeth" is immensely interesting. And pray can you tell me where it was that years and years ago I read somewhere in the classics a justification of the introduction of the drunken porter with his hilarious noise just on top of the murder of the King by Macbeth?

—JULIA D. PORTER

This is Thomas De Quincey's famous essay, "On the Knocking at the Gate in Macbeth." The scene is introduced in the play in this way:

LADY MACBETH: My hands are of your color; but
I shame

To wear a heart so white. [Knocking within.]
I hear a knocking

At the south entry: retire we to our chamber.

A little water clears us of this deed:

How easy it is then! Your constancy
Hath left you unattended. [Knocking within.]

Hark! more knocking:

Get on your nightgown, lest occasion call us,
And show us to be watchers: be not lost
So poorly in your thoughts.

MACBETH: To know my deed, 'twere best not
know myself. [Knocking within.]
Wake Duncan with thy knocking! I would thou
couldst! [Exeunt.]

[Enter a Porter. Knocking within.]

PORTER: Here's a knocking indeed! If a man
were porter of hell-gate, he should have old turning
the key. [Knocking.] Knock, knock, knock.
Who's there, i' the name of Beelzebub? Here's a
farmer that hanged himself on the expectation of
plenty: come in time; have napkins enow about
you; here you'll sweat for't. [Knocking.] Knock,
knock! Who's there, i' the other devil's name?
Faith, here's an equivocator, that could swear in
both the scales against either scale; who committed
treason enough for God's sake, yet could
not equivocate to heaven: O come in, equivocator.
[Knocking.] Knock, knock, knock! Who's
there? Faith, here's an English tailor come
hither, for stealing out of a French hose: come in,
tailor, here you may roast your goose. [Knock-
ing.] Knock, knock: never at quiet! What are
you? But this place is too cold for hell. I'll
devil-porter it no further: I had thought to have
let in some of all professions, that go the primrose
way to the everlasting bonfire. [Knocking.]
Anon, anon! I pray you, remember the porter.

De Quincey's comment, in part, follows:

"From my boyish days I had always
felt a great perplexity on one point
in 'Macbeth.' It was this: The knock-

ing at the gate which succeeds to the
murder of Duncan produced to my feel-
ings an effect for which I never could
account. The effect was that it re-
flected back upon the murderer a pecu-
liar awfulness and a depth of solemnity;
yet, however obstinately I endeavored
with my understanding to comprehend
this, for many years I never could see
why it should produce such an
effect. . . .

"My understanding could furnish no
reason why the knocking at the gate in
'Macbeth' should produce any effect,
direct or reflected. In fact, my under-
standing said positively that it could
not produce any effect. But I knew
better; I felt that it did; and I waited
and clung to the problem until further
knowledge should enable me to solve
it. . . . At length I solved it to my
own satisfaction; and my solution is
this: Murder, in ordinary cases, where
the sympathy is wholly directed to the
case of the murdered person, is an inci-
dent of coarse and vulgar horror; and
for this reason—that it flings the
interest exclusively upon the natural
but ignoble instinct by which we
cleave to life: an instinct which, as
being indispensable to the primal law
of self-preservation, is the same in
kind—though different in degree—
amongst all living creatures. This
instinct, therefore, because it annihi-
lates all distinctions, and degrades the
greatest of men to the level of 'the
poor beetle that we tread on,' exhibits
human nature in its most abject and
humiliating attitude. Such an attitude
would little suit the purposes of the
poet. What then must he do? He must
throw the interest on the murderer. . . .

"In 'Macbeth,' for the sake of gratify-
ing his own enormous and teeming
faculty of creation, Shakespeare has
introduced two murderers: and, as
usual in his hands, they are remarkably



FLORENCE REED AS LADY MACBETH

discriminated: but—though in Macbeth the strife of mind is greater than in his wife, the tiger spirit not so awake, and his feelings caught chiefly by contagion from her—yet, as both were finally involved in the guilt of murder, the murderous mind of necessity is finally to be presumed in both. This was to be expressed; and, on its own account, as well as to make it a more proportionable antagonist to the unoffending nature of their victim, 'the gracious Duncan,' and adequately to expound 'the deep damnation of his taking off,' this was to be expressed with peculiar energy. We were to be made to feel that the human nature—i.e., the divine nature of love and mercy, spread through the hearts of all creatures, and seldom utterly withdrawn from man—was gone, vanished, extinct, and that the fiendish nature had taken its place. . . . Here, as I have said, the retiring of the human heart and the entrance of the fiendish heart was to be expressed and made sensible. Another world has stepped in; and the murderers are taken out of the region of human things, human purposes, human desires. They are transfigured: Lady Macbeth is 'unsexed'; Macbeth has forgot that he was born of woman; both are conformed

to the image of devils; and the world of devils is suddenly revealed. But how shall this be conveyed and made palpable? In order that a new world may step in, this world must for a time disappear. The murderers and the murder must be insulated—cut off by an immeasurable gulf from the ordinary tide and succession of human affairs—locked up and sequestered in some deep recess; we must be made sensible that the world of ordinary life is suddenly arrested, laid asleep, tranced, racked into a dread armistice; time must be annihilated, relation to things without abolished; and all must pass self-withdrawn into a deep syncope and suspension of earthly passion. Hence it is that, when the deed is done, when the work of darkness is perfect, then the world of darkness passes away like a pageantry in the clouds: the knocking at the gate is heard, and it makes known audibly that the reaction has commenced; the human has made its reflux upon the fiendish; the pulses of life are beginning to beat again; and the re-establishment of the goings-on of the world in which we live first makes us profoundly sensible of the awful parenthesis that had suspended them.



LYN HARDING AS MACBETH

READING WITH A PURPOSE

BY RALPH MUNN, *Director of the Carnegie Library of Pittsburgh*



"WE cannot abandon our education at the schoolhouse door. We have to keep it up through life."

Thus President Coolidge expresses the conviction which is driving millions of Americans

into extension classes, correspondence schools, forums, worker's colleges, and libraries.

Of all of these agencies which offer educational facilities to adults, only the public library is free to all comers, irrespective of age, sex, and formal schooling. The ability to read is the public library's only entrance requirement. If one can read, he can use its facilities profitably.

The library offers courses of study which are as varied as the books on its shelves. Since there are no classes, each student can choose his own time and place of study and he can progress quickly or slowly according to his own abilities. As there are no teachers, the library offers self-education, which is frequently the most lasting and effective of all.

All of the library's activities may be said to be educational. Even the reading of a light novel can scarcely fail to give some new viewpoint, some added experience.

But to mobilize the public library's facilities and to make them function more definitely and adequately in the field of adult education is one of the chief concerns of librarians today.

So important are the educational possibilities in the public libraries of America that the Carnegie Corporation

of New York has sponsored an intensive study by the American Library Association's Board on the Library and Adult Education. This Board, now in its fourth year, has formulated a threefold program for public libraries.

It first recommends that each public library become an information center concerning all agencies for part-time education in its own community. Thus the Carnegie Library of Pittsburgh should have complete data concerning every class of whatever nature that is conducted in this city. In Boston and elsewhere this information has been compiled, greatly to the advantage of many earnest students who did not know where to apply for the courses they desired. We in Pittsburgh hope to offer this service before another year.

The Board's second suggestion is that each public library ally itself with every educational agency of its city, supplying their book needs as far as possible. Pittsburgh's library is now doing this to some extent.

Now we come to the library's services to those who do not wish to join a formal class but would be glad to follow purposefully an individual course of reading. Here lies the library's greatest opportunity, and also its most difficult problem.

In the ideal library of the future every library assistant will be as well educated as a college instructor and with personal and social qualities of the highest type.

Dr. William S. Learned in his "American Public Library and the Diffusion of Knowledge" foresees the time when the staff of every great public library will comprise a "faculty" of experts, each one specializing in one of the fields of knowledge. These librarians will be masters of their subject matter, thoroughly acquainted with its litera-

THE CARNEGIE MAGAZINE

ture, and competent to aid the expert as well as the beginner. A start toward this goal has been made at the Library of Congress through the endowment of several chairs for consultants in different fields.

Imagine the efforts of the public library of today, with its average salary of about \$1,500, in recruiting a "faculty" of experts!

And so, says the Adult Education Board, since only a part of the staff can be even moderately well equipped, let us have one or two of the best members especially designated as reader's aids. Free them from routine duties. Fortify them with every printed help which can be found. Supply them with courses of study which are made by real experts.

This last suggestion has resulted in the "Reading with a Purpose" courses of study, which bring to Pittsburgh and to every other city the services not only of experts but, in many cases, of the one man in the world who is perhaps best qualified in his subject.

The following impressive names, carrying the authority of each author on his own subject, will insure readers of the high excellence of the courses:

Biology	VERNON KELLOGG
English Literature	W. N. C. CARLTON
Ten Pivotal Figures of History	AMBROSE W. VERNON
Some Great American Books	DALLAS LORE SHARP
Frontiers of Knowledge	JESSE LEE BENNETT
Ears to Hear: A Guide for Music Lovers	DANIEL GREGORY MASON
Sociology and Social Problems	HOWARD W. ODUM
The Physical Sciences	EDWIN E. SLOSSON
Conflicts in American Public Opinion	WILLIAM ALLEN WHITE and WALTER E. MYER
Psychology and Its Use	EVERETT DEAN MARTIN
Philosophy	ALEXANDER MEIKLEJOHN
Our Children	M. V. O'SHEA
Religion in Everyday Life	WILFRED T. GRENFELL
The Life of Christ	RUFUS M. JONES
The Appreciation of Sculpture	LORADO TAFT
The Europe of Our Day	HERBERT ADAMS GIBBONS
The Poetry of Our Own Times	MARGUERITE WILKINSON
The United States in Recent Times	FREDERIC L. PAXSON
Pleasure from Pictures	HENRY TURNER BAILEY
American Education	WILLIAM F. RUSSELL

Architecture	LEWIS MUMFORD
The Modern Essay	SAMUEL MCCHORD CROTHERS
Americans from Abroad	JOHN PALMER GAVITT
The French Revolution as Told in Fiction	WILLIAM STEARNS DAVIS
The Practice of Politics	RAYMOND MOLEY
The Modern Drama	BARRETT H. CLARK
The Westward March of American Settlement	HAMLIN GARLAND
The Stars	HARLOW SHAPLEY
The Founders of the Republic	CLAUDE G. BOWERS
The Foreign Relations of the United States	PAUL SCOTT MOWBRER
Twentieth-Century American Novels	WILLIAM LYON PHELPS
A Study of English Drama on the Stage	WALTER PRICHARD EATON
Pivotal Figures of Science	ARTHUR E. BOSTWICK
George Washington	ALBERT BUSHNELL HART
Economics	LEON C. MARSHALL
Mental Hygiene	FRANKWOOD E. WILLIAMS
Good English	VIRGINIA C. BACON
Adventures in Flower Gardening	SYDNEY B. MITCHELL
French Literature	IRVING BABBITT
The Young Child	BIRD T. BALDWIN
Interior Decoration	HAROLD D. EBERLEIN
Geography	J. RUSSELL SMITH
Prehistory	GEORGE GRANT MACCURDY
Living Religions of the World	ROBERT ERNEST HUMB

Others are planned, some of which will cover vocational subjects. Readers who wish to follow any of the present courses may register in the Adult Lending Department of the Central Library.

The Library will reserve for them the books recommended in the course. Each course sells for ten cents. The charge for reserving books is waived in the cases of registered users of these courses.

Each reading course contains a short essay which sets forth the high lights of the subject. Usually it gives a bit of the historical setting, the importance of the subject, its relationship to other fields of knowledge, and its present trend of development. Then follow brief reviews of the books which the author has selected. Most of the courses recommend not more than eight books.

The authors of these courses have been surprisingly successful in shaping them to meet the needs of large numbers of readers. Libraries which have used them extensively report that in most cases they are satisfactory for all except the really advanced student

and the reader who has no background at all.

Fitting these courses to individual needs, compiling lists on other subjects, and advising on the selection of books for general reading are the duties of the readers' aids or readers' advisers who are now becoming more numerous in public libraries.

"Too busy" and "Too old to learn" will no longer pass as excuses for the men and women who go through life with yawning gaps in their education.

"Too busy" has been eliminated by the public library which provides selected courses of reading which can be fitted into the few minutes of each day which every one wastes.

"Too old to learn" was a convenient old bogey but it was completely put to rout in Dr. Thorndike's recent studies on the learning ages. While there's strength to wield a niblick or to raise a partner's bid, there is still time to learn.

NATIONAL DRAMA WEEK

THE cultured minds of the country will follow with sympathetic interest the celebration of National Drama Week from February 3 to 9, which is being sponsored by the Drama League of America. That the League deserves this interest is set forth in its fourfold purpose each year in observing Drama Week—to secure in every city an organized audience of discriminating playgoers who will support artistic productions of professional plays and encourage the study of published plays of merit; to take stock of the dramatic resources of the country in their present status and in their future prospects; to awaken the public to the importance of the drama as the most intimate and comprehensive medium of self-expression both in and out of the theatre; and to gain the cooperation of those organizations and individuals which are concerned in the promotion of civic life through art.

THE ISOLATION OF INSULIN

In a recent publication by Dr. John J. Abel, of Johns Hopkins University, the isolation of insulin in the pure crystalline state is announced, and its chemical nature and physical properties are described. This is of great interest to friends of the Institute; for the investigations which have led to this result were begun by Dr. Abel in the Gates Chemical Laboratory in 1925, in pursuance of an invitation to spend the winter here—an invitation which was made possible by a grant by the Carnegie Corporation of New York to the Institute for the continuation of its insulin researches already being carried on by Professor Noyes, Dr. G. A. Alles, and Dr. A. L. Raymond, with the cooperation of Dr. Bernard Smith and Dr. Howard F. West of Los Angeles.

It may be recalled that insulin is the catalytic substance secreted by the pancreas which causes the sugar of the blood to be oxidized in the tissues of the body, and that a deficiency of this substance, arising from a diseased condition of the pancreas, gives rise to diabetes; also that a properly prepared pancreas-extract has proved a most valuable remedy in the treatment of this disease.

Through his researches at the Institute, made with the assistance of two graduate students in chemistry, Dr. Abel had already obtained more concentrated preparations of insulin than those previously available, and had proved that their physiologically active constituent (the insulin itself) was a sulfur compound. Since then he has devised a simple process by which it can be obtained in the form of small colorless crystals and has determined its composition, which he finds to be expressed by the complicated formula $C_{45}H_{89}O_{14}N_{11}S$.

This preparation of pure insulin will not only contribute much to the successful treatment of diabetes, but will enable its chemical structure to be scientifically studied, and may eventually lead to the artificial preparation of the substance. Indeed, associates of Dr. Abel, working in his laboratory at Johns Hopkins University, have already identified several amino acids, including one containing sulfur, that are produced from crystalline insulin when it is broken down into its constituent substances by the action of acids.

—BULLETIN OF THE CALIFORNIA
INSTITUTE OF TECHNOLOGY

BUT DO WE?

The whole scheme of human society, the whole progress of civilization requires that we should have faith in men and in nations.

—CALVIN COOLIDGE

BUT THEY DO!

How any one can possibly desire to arrange the lives of others is quite incomprehensible.

—GAMALIEL BRADFORD

THE SOUTH AFRICAN EXPEDITION

MR. RUDYERD BOULTON, assistant Curator of Ornithology of the Carnegie Museum, and Mrs. Boulton departed on January 5 for a scientific expedition to Africa. The expedition is sponsored by Mrs. Oscar Straus, widow of the late Secretary of Commerce, and by the American Museum, and will be devoted mainly to the studies of bird life and the gathering of birds and insects. Upon reaching the African con-



MR. AND MRS. RUDYERD BOULTON

tinent, the exploring party will proceed by the Nile to Nyasaland. After the termination of the field work in Equatorial Africa for the benefit of the American Museum Mr. and Mrs. Boulton will go to South Africa, where they will assemble collections for the Carnegie Museum.

There are almost no representative collections of the birds of South Africa in this country, although they are fairly well known, which makes it important that material from this region be available for comparison in identifying the species from other African localities. The primary object of the expedition is to obtain a collec-

tion of the birds and insects of South Africa, though opportunities for assembling material in other branches will not be overlooked. Mrs. Boulton expects to make studies of native music throughout the trip. Their travel in South Africa will be chiefly by railroad to suitable collecting points, from which motor cars and safari will be used to reach the more inaccessible parts of the veldt. The Drakensberg Mountains will be visited in the hope of collecting there the bald ibis, found only in that region and extremely rare in museum collections. The itinerary will include the Kalahari Desert in Bechuanaland, where sand grouse, ostriches, bustards, and other desert birds abound. Penguins and other interesting water birds will be hunted on the islands off the southwest coast of Africa. The route of the expedition is planned to cover on the West and South the areas bordering Angola, and thus link, by observation and collection, those made by Mr. Boulton in a former expedition to Portuguese West Africa in 1925.

117,514 VISITORS SEE THE INTERNATIONAL

THE Twenty-seventh International Exhibition of Paintings was viewed by 117,514 people from October 18 to December 9.

During the period of the Exhibition thirty-two paintings were sold, amounting to about \$50,000. Pittsburghers purchased twenty-six of the paintings and the remaining six were sold to people from other cities. Of the total number sold, twelve were by American artists and twenty by Europeans. It is interesting to note that nineteen were by advanced artists and thirteen by conservative.

The European paintings in the Exhibition are now being shown at the Cleveland Museum of Art and will be on view there until February 17. They will be then seen at the Art Institute of Chicago from March 11 to April 21.

"THE PLAY'S THE THING"

*A Review of "Richelieu" Given at the Tech Little Theatre and the
"Coventry Nativity Play" Given at Saint Mary's
Episcopal Church and the Trinity Cathedral*

BY E. MARTIN BROWNE, Assistant Director of Drama



IN England Christmas always brings revivals of a multitude of old favorites in the theatre: Barrie's "Peter Pan," "Charley's Aunt," "When Knights Were Bold," "Alice in Wonderland"—sometimes even, defy-

ing the course of nature, "A Midsummer Night's Dream." The Drama Department, struggling bravely against the influenza epidemic, has been concerned in two productions which suggest the English policy. At the Tech Little Theatre Mr. Chester Wallace revived one of the oldest of favorites, Bulwer-Lytton's "Richelieu." A vehicle of Booth, Macready, and Irving, it became theatrical history and is a mine of quotations.

It still holds the attention—the heroic drama of history has a lasting power which is denied to lighter species. But a lover of Shakespeare and the Elizabethans finds it often burdensome, because it has almost no poetry. Sir Walter Raleigh—he of the twentieth century, not he of the sixteenth—most sensitive of Shakespearean critics, has said that "poetic drama died in England in 1642 and has had no second life." It was all too true ten years ago—perhaps now there are signs of a reawakening. But Bulwer-Lytton was too early for it. His language is heavy and uninspired.

This means that to revive him is the hardest of all tasks in the theatre. An admirable exercise, therefore, for the students. All the technical resources, all the force of personality that the actor can command will barely suffice to win an audience's acclaim in it. At Tech it served, in how many cases, to show what the students had to learn—a humiliating but very salutary experience. Many of our audience, like ourselves, find interest in observing the progress of our students from year to year. Such a production as this is an



HENZIE MARTIN BROWNE SKETCHED
AS THE VIRGIN MOTHER

acid test of such progress. Their type helps them nothing—it is only force and polish on the stage which makes it effective.

The other play was not officially a Drama Department production at all, but has been so closely connected with the Department's work that it may interest those who follow its doings. At Saint Mary's Episcopal Church in McKee Place the writer produced at the end of December the "Coventry Nativity Play." It was revived by request at Trinity Cathedral on January 6 and again at Saint Mary's on January 13. The play is one of the religious dramas which were written and performed in cycles by the trade guilds of England during the fourteenth and fifteenth centuries. It represents, in the simplest of free rhymed verse, the Christmas story—Annunciation, Birth of Jesus, the Shepherds and the Kings, and Herod. The atmosphere is one of instinctively deep emotion—a faith so well grounded that it can laugh at Herod and can allow the Shepherds to speak in the homeliest way to the Child Jesus. The play is full of the joy that is characteristic of medieval religion and depends for its effectiveness upon the reproduction of that spirit.

The production was the work of Saint Mary's priest and congregation. The latter, however, included the writer and a few members of the student body, who gathered others of like mind around them. Here was an experience entirely the opposite of "Richelieu," and equally valuable in its own way. The play was written by and for amateur actors; it needs very little theatrical technique, but it cannot do without a sense of rhythm and a sense of religion. Those student actors who were mixed with the purely amateur members of Saint Mary's tried a new medium of expression—one which nearly all of them found entirely delightful and deeply satisfying. It seems desirable that these dramas of simple faith and homely joy should be more

often seen—so at least both actors and audience appeared to think.

The student actors in the "Nativity Play" had a further advantage—the inclusion of an experienced professional actress in the rôle of the Virgin Mother. The accompanying picture of her by Mrs. Alice Clapp, whose brilliant decorative painting contributed so much to the beauty of the production, shows how telling the performance was; and the inspiration that performance gave, both in technique and in spirit, to her fellow-players will be a valuable part of their theatrical education.

THE ANNUAL WURTS CHRISTMAS DINNER



ALEXANDER J. WURTS

THE second Christmas dinner for the Tech boys who were unable to go home for the holidays was given on December 26 at the home of Professor and Mrs. H. K. Kirk-Patrick.

These annual dinners are provided by an endowment fund which Alexander J. Wurts, chairman of the Student Welfare Committee at Tech, established in 1927 for that purpose. It was a typically American dinner, topped off by a plum pudding from England and made from a recipe that has been handed down in Mrs. Kirk-Patrick's family for the past three hundred years. The favors were cigarette lighters.

Ten young men from various parts of the United States, England, South America, Scotland, and Poland—W. H. Adams, C. W. Armstrong, Crisarto Duarte, John C. French, Adolf Gromada, T. W. Hunter, T. W. McCulloch, C. J. D. Miller, E. J. Morris, and S. M. Sherman—enjoyed the generous thoughtfulness of Professor Wurts and the hospitality of Mr. and Mrs. Kirk-Patrick.

COMPETITIVE DRAWINGS BY HIGH-SCHOOL PUPILS

SOME time ago an account was printed in this Magazine about an exhibition of drawings by pupils of the local schools under the auspices of the Carnegie Museum. That contest called for sketches of animals and plants exhibited in the galleries of the Museum and required the use of various mediums in rendering the subjects. The success of this competitive exhibition prompted the organization of another contest among pupils of the schools of Pittsburgh, this time laying stress upon the decorative possibilities which can be derived from the observation of living forms. The regulations were worked out in conjunction with Mr. James C. Boudreau, then Director of Art in the Public Schools, who very kindly brought this plan to the notice of the schools of the community. The response was very enthusiastic, and the results far exceeded expectations. The entries sent from high schools were as follows:

Allegheny, 10; Schenley, 17; Peabody, 44; Fifth Avenue, 7; South, 6; and Carrick, 9.

In accordance with the rules of the contest, each competitor had to draw some animal or plant, living or extinct, among the specimens shown in the galleries, and work out a decorative scheme for textiles, ceramics, and jewelry on the basis of the selected motive. The projects of textiles were of high merit in the general run, showing in many cases an excellent composition and a good sense of color. The drawings for vases, glassware, and tiles displayed an unusual inventiveness in adapting the character of the originals for appropriate ornamentation and might be readily used for manufacturing purposes. Many pieces of projected jewelry were designed with fine taste and gracefully emphasized the peculiarities of the living forms. The winning competitors were: Ruth Lightcap, Schenley High School, First Grand

Prize; Eugene Gittings, Peabody High School, Second Grand Prize; Edna Boffey, Carrick High School, Third Grand Prize; and Helen Cuff, Schenley High School, Grand Honorable Mention. Besides these prizes, every school was awarded a First and Second Local Prize, and special recognition was given for the best design in textiles, ceramics, and jewelry.

The schools should be heartily congratulated upon the efficient training in art which they give to the boys and girls in cultivating and directing their native abilities. The Museum extends the sincerest gratitude for the excellent spirit of cooperation which was displayed by the authorities of the high schools in bringing together such a large group of contestants.

The aim of this exhibition was, primarily, to stimulate a keener interest in our displays, to heighten the sense of observation of the objects of nature, and to help our youthful visitors to realize the esthetic value of living forms as an endless source of information and artistic appreciation. It is planned to conduct in the future similar contests—for instance, we intend to take the book and its decoration as the theme for the next competition, trusting that the young artists will find ample material in the Museum for transcription in graphic terms. Various ornaments for the printed page, illustrations, and book covers will give an excellent opportunity for creative imagination guided by the study of animal forms.

—A. AVINOFF

It has been said that variety is the spice of life. But it is much more than that. It is one of the very essentials of a correct diet of living, just as variety of food is an essential of a correct diet of nourishment.

As the soil of agricultural land requires rotation of crops in order to produce the best results, so does the soil of our inner being require variety of treatment in order to remain elastic and fertile, and to enable us to produce the best we are capable of.

—OTTO H. KAHN

OUR NATIONAL HUMILIATION

[AN EDITORIAL]

THE President of the United States, in pursuance of the American ideal of World Peace, sent his Secretary of State to Europe, where all the nations of the earth assembled by representation and with universal eagerness and enthusiasm appended their signatures to a brief document renouncing war as an instrument of national policy. President Coolidge thereupon submitted this unprecedented achievement to the United States Senate, confidently expecting its instant ratification. Whereupon, some of the mighty and majestic statesmen in that body raised their hands to heaven and declared that no measure should ever have their votes which would in the slightest way obstruct the natural right of this Nation to slaughter the chivalry of the world in war. Their minatory opposition threw the world at first into a nervous chill and afterwards into a state of derision. Uncle Sam at once lost the respect of other nations as a benevolent peacemaker and took on the character of a braggart and a swashbuckler, while the

President's authority was irretrievably impaired. The first definite reaction to this amazing and fatuous policy of the Senate comes from Japan, where it is now proposed to turn aside from the fantastical dream of peace and arm to the teeth in order to be prepared for the day of final destruction. The other nations will soon follow Japan's lead, and Shakespeare has forecast the end for us all:

"The cloud-capped towers, the gorgeous palaces,
The solemn temples, the great globe itself,
Yea, all which it inherit, shall dissolve,
And, like this insubstantial pageant faded,
Leave not a rack behind."

—SAMUEL HARDEN CHURCH

NOTE: The Treaty passed the Senate on January 15, but not until incalculable harm had been done to its prestige by the foolish and wicked speeches of some of the members, one of whom warned his countrymen that the British guns at Bermuda are pointed at the heart of the United States.

TEXTILE EXHIBITION

THE Carnegie Museum has opened an exhibition of textiles which were assembled and lent by Mrs. Walter H. Siple, Curator of Decorative Arts, of the Worcester Art Museum, and Miss Nancy Andrews Reath, Curator of Textiles, of the Pennsylvania Museum. This collection has been placed on view in one of the galleries of the Department of Fine Arts. It constitutes an instructive display of the principal types of weaving in different countries at various periods and is a representative assemblage of examples of hand-loom fabrics, including different cloths, velvets,

tapestries, twills, satins, damasks, and brocades. It is a colorful set of beautiful tissues, interesting both from the technical and from the historic aspect. Ancient Peruvian textiles, Pre-Columbian looms, Coptic fabrics, Indian, Japanese, and Persian pieces, rich brocades of the Mediaeval and Renaissance periods, American fabrics of various epochs—all add color and diversity to the show.

The collection will remain on view during the month of January and cannot fail to attract the students of applied arts, as well as the general public.

THE CARNEGIE MAGAZINE

INSTITUTE LECTURES

MUSEUM

- JANUARY 17—"Exploring Coral Forests," by Dr. Roy Waldo Miner. 8:15 in Lecture Hall.
- JANUARY 20—"Coast Guard Service," by Oliver M. Maxam. 2:15 in Lecture Hall.
- JANUARY 27—"Trails and Tales of the Rockies," by Col. Phillip Moore. 2:15 in Lecture Hall.
- FEBRUARY 3—"Hawaii," by Dr. Charles Payne. 2:15 in Lecture Hall.
- FEBRUARY 7—"Labrador," by W. E. Clyde Todd. 8:15 in Lecture Hall.
- FEBRUARY 10—"Fly with Me over Pikes Peak," by Gilbert McClurg. 2:15 in Lecture Hall.
- FEBRUARY 17—"Spring Wild Flowers," by Dr. O. E. Jennings. 2:15 in Lecture Hall.

TECH

- JANUARY 23, 24, and 25—"Spectra and the Theory of Groups," by Professor Hermann Weyl, of the Zürich Technical School. 8:30 in Carnegie Union.

PREACHERS IN POLITICS

Jesus Christ lived in a time very much like this. He lived in a day when slavery existed, but look at the record and see if he said one word against slavery. He lived in a time of great drunkenness, when Rome was about to fall because of drunkenness and licentiousness. Yet we find no word in regard to that. Instead, he came and told a group of people of the divinity within them, the perfection of God within themselves. He told them that the Kingdom of Heaven was within them.

But almost every moral idea of man that has been enacted into law has been a temporary idea with respect to what is moral and what is not. Much of the morality of the world is of an artificial nature. Religion has not for its function the making of lines of demarcation between this thing and that, and it has always got into trouble by doing so. Religion abandons its high and divine prerogative when it attempts to do such things. We have no foundation for such attempts to direct the morals of others.

My church has abandoned forever the outward manipulation of the morals of men, and must seek its power at the seat of power, in the soul of man.

—REV. ALBERT C. GRIER

The alternative before us in Europe is very simple: We either keep faith with the spirit of the Pact that we have signed or, in time, we go down a steep place all together like Gaderine swine and perish eternally.

—STANLEY BALDWIN

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 W. E. CLYDE TODD, Curator of Ornithology
 O. A. PETERSON, Curator of Fossil Mammals
 ARTHUR W. HENN, Curator of Ichthyology
 HUGO KAHL, Curator of Entomology
 REMI H. SANTENS, Chief Preparator in Section of Zoology
 SYDNEY PRENTICE, Draughtsman

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